

At a meeting of drug manufacturers in Washington last month the following resolution was passed:

"Resolved, That the organization of local clubs or associations of manufacturing, distributing and dispensing pharmacists and practicing physicians will tend to promote a better feeling and understanding between these professions to the advantage of the communities they serve, and such an organization should be formed and maintained in every large city."

These presentations of the subject under discussion are not far apart; the former is from a representative of the medical profession and the resolution was prepared by representatives of drug industries. Only selfish motives prevent the desirable coöperation of the medical professions, whereas the mutual relation should be for best public service. It is not improbable, if a more general expression of medical men and pharmacists were obtainable, that their aims and purposes would be found to harmonize more closely than indicated. There is lack of action. Both are concerned in many legislative matters at the present time, and the sooner graduation in pharmacy becomes a prerequisite for those who deal in and prepare medicines, the better and more safely will the public be served, and it will also be for the best interests of medicine and pharmacy. Herein is an opportunity for coöperation in which the support of the medical profession should be forthcoming. Everyone realizes the dangers that may result from undesirables in drug stores under prohibition regulations. No class is free from those who yield to mercenary persuasion, but responsibilities limit that number, or, at least, regulations can be more readily and effectively provided for them. Unquestionably, in many states, and probably in those without prerequisite laws, medical men are more influential in legislative halls than pharmacists. They should coöperate in a coördinated endeavor to effect such legislation. The public will be better served.

E. G. E.

THE NATIONAL NATIONAL FORMULARY.

BY WILBUR L. SCOVILLE.

The primary purpose of the National Formulary was to provide standard formulas for the members of the American Pharmaceutical Association. For the men in pharmacy who are sincerely interested in the professional side of pharmacy. For those whose joy in knowledge and skill is not secondary to their remuneration therefor. Whose satisfaction in compounding a prescription that has baffled others is even greater than the profits accruing therefrom. Whose chief pleasure is professional rather than financial achievements. For of such are the members of the American Pharmaceutical Association. And the National Formulary has reflected the wants of such pharmacists.

For this reason it has retained the best of the older pharmacy. It has kept on record formulas which have gone out of style or which have never become entirely Americanized. It has preserved many articles because of old associations

and the sentiment that they hold. And it is loath to follow the fashion and fads of the day, preferring rather to hold fast that which is good. And for the professional pharmacist, it has served a good purpose and established a good repute.

But when the Congress of June 1906 recognized the National Formulary as one of the established standards, it did not recognize only the men and women of the American Pharmaceutical Association, comprising less than ten percent of the pharmacists of these United States; it recognized pharmacy as a whole. And this includes the pharmaceutical specialist, the "average" pharmacist, the commercialized pharmacist, and the frankly commercial pharmacist. The one with professional aspirations and the one without. The one to whom pharmacy is a vocation, and the one to whom it is simply a means of making money—or even an excuse.

Now the National Formulary is a legal standard for all of them. Not that it makes any difference in the legal aspects whether the pharmacist is friendly in his attitude toward it or not, but that it should be fair and as representative to the interests of all as possible. Since government needs the consent of the governed, and a standard is a part of government, it will be the more efficient standard in so far as it meets the needs of all rather than of a portion. In other words, the National Formulary, by virtue of the Food and Drugs Act, is no longer supposed to represent the American Pharmaceutical Association alone, though that ASSOCIATION is still its sponsor, but it must aim to meet, as a standard, the needs of those outside of the ASSOCIATION as well. Its outlook and its purpose are necessarily changed as well as its field.

It must pay the price of a broadened sanction by adopting a broader policy. That is to say, it should consider well the needs and the point of view of the commercial pharmacist as well as of the professional. As a National standard it must reflect national breadth. And there is a feeling abroad that it does not so reflect. Whether that judgment is sound or not, it undoubtedly exists.

Probably this feeling is engendered from the contents of the Formulary rather than from the way it treats those contents. I have heard little criticism of the formulas included, but much of the scope. That it contains too many things which are of no value. That so many formulas are obsolete, and that it is not "up to date."

This question of scope is extremely difficult to decide. Pharmacists, like other humans, find it a relief to criticize but a burden to help. They do not respond in any large degree to the invitation to express their views. An invitation which was published in every drug journal in this country last summer brought less than a dozen replies. How are 15 men to know what 50,000 want when the latter won't say?

Professor Newcomb did an excellent service through the media of the Minnesota Pharmaceutical Association and the *Northwestern Druggist* in sending out a questionnaire to all the pharmacists of five states, to which about 750 responded. This entailed a lot of work, and the results are of much value. The Philadelphia Branch of the A. Ph. A. has done a similar work in Philadelphia, the results of which have not yet been reported. Other branches have considered the question of scope in open meeting, and have made very helpful suggestions. But even all of these but lightly touch the question because the questionnaire dealt only with a fraction of the articles, and it reached a still smaller fraction of all the pharma-

cists—except through the press which so generously gave of its space. To ascertain just what a majority of pharmacists in the United States consider as desirable in the National Formulary would be a large undertaking even if a majority of the pharmacists would respond. But to presume that a majority would spend the considerable time needed to really ascertain and record for themselves what they consider desirable and undesirable is not probable. So it is up to the National Formulary Committee to judge from what help it can secure, and according to its own breadth of view, what the scope shall be.

To get another angle of view on this question, the writer recently made a study of the catalogues of six of the largest pharmaceutical manufacturing concerns to ascertain to what extent N. F. preparations are made by them. This study will, at least, have some significance regarding the use of N. F. preparations by the pharmacist who "buys everything ready made" and we owe him consideration. At any rate the study is interesting and illuminating.

There are 90 fluidextracts in the N. F. Sixty of these, or two-thirds, are listed in all the six catalogues, and all but two of the others are listed in one to five of the catalogues. Only two of the 90 are in no commercial demand, which indicates that about 97 percent of the N. F. fluidextracts are "going concerns." Not much obsolete material here. But when we consider the tinctures we get a different impression. Of the 48 tinctures in the N. F. only two are listed in all six catalogues and 22 are not listed at all. That suggests that there is not sufficient demand for nearly half of the N. F. tinctures to warrant their listing by our largest manufacturers. The tinctures which are so ignored include *cocculus indicus*, saffron, ammoniated ergot, ethereal ferric chloride, ferrated extract of apples, *ignatia*, jalap, jalap compound, kino and opium, opium with saffron, *paracoto*, pectoral tincture, *pimpinella*, *pulsatilla*, aqueous rhubarb, rhubarb and gentian, saw palmetto and santal (elixir preferred), *sumbul*, and bitter tincture of zedoary. Some of the above have been in good repute in the past but have been superseded, and some have been imported but failed to take root in American practice. That caramel and cudbear and compound cudbear tinctures are not in the lists is of little significance, because pharmacists who use these are pretty sure to make them, while pharmacists who make few preparations would have no use for them.

In the elixirs we again get an illuminating jolt. Of the 76 elixirs in the National Formulary but 15 are listed in all six catalogues, and 27—more than a third—are not listed in any. On the other hand there are more than a score of elixirs listed by three to six of the catalogues but not recognized by the National Formulary. Evidently the N. F. list of elixirs is not very close to the commercial demands. And one of the manufacturers lists 211 elixirs, while all list more than are numbered in the National Formulary.

Syrups again show a considerable discrepancy. Of the 44 syrups in the N. F. only 6 are listed by all six manufacturers, and 21 or almost one-half are not listed at all. On the other hand some syrups are in active demand which are not recognized by the N. F.

Similarly the liquors get but little attention from manufacturers. Only 12 of the 54 official N. F. liquors appear in the six catalogues. As active sellers it would appear that most of this class is now out of date. And new solutions to take their place are not numerous. Liquors do not cut a very large figure in the commercial catalogues.

Of the 12 ointments only 3 appear in any of the catalogues, and as many more appear to be in active demand which are not in the National Formulary.

The study is not complete, either in the variety of preparations compared or in the list of manufacturers. But it is enough to show that there are considerable discrepancies between the contents of the National Formulary and commercial demands.

I do not think that commercial demands ought to wholly control the scope of the Formulary. Aside from the fact that there are a number of formulas which should be standardized, yet will have little demand from the manufacturers, the use of formulas must be considered primarily for the retail pharmacist. But the study throws some light, nevertheless, upon the usefulness of the book to a large class of pharmacists who do not make their preparations but purchase from the jobber or manufacturer.

Incidentally it may be noted that two of the catalogues consulted make it a feature of their business to distribute through the wholesale druggists, thus further indicating the line of commercial demands.

The study is recorded in much greater detail than is given above, and may prove of some value in determining the scope of the next edition of the National Formulary.

COÖPERATION IN SCIENTIFIC RESEARCH.

For the ravages and economic difficulties resulting from the world war we may as well extract what comfort we can from reflecting upon the valuable lessons which it has taught us. Indeed, it is more than merely a matter of seeking comfort. If we fail to profit by the experience, so much will be added to the disaster.

Second perhaps to none in importance, among the revelations of the war, are the latent possibilities of coöperation in scientific and technical research. Only those who were directly connected with scientific work in relation to the conduct of the war can fully appreciate the significance of this fact. We are told, for example, that in a single two days' conference of American plant pathologists, by the free interchange of facts and ideas, more progress was made in the solution of the difficult problems of leaf roll and mosaic than would have been secured in five years of scattered individual effort. And this is but one instance of the tremendous gain which such coöperation has brought.

In scientific and particularly in technical research lack of coöperation means not only needless duplication of effort, but incalculable loss through arrested development. It is often the combination of the ideas of two or more individuals that furnishes the solution of a problem. When these ideas are not brought together, they cannot combine. Hence it follows that free interchange of thought accelerates progress in altogether incalculable proportion.

Yet a species of pardonable professional jealousy, or the fear of giving aid to a competitor in trade, has long been allowed to place obstacles in the way of such interchange of ideas. A less self-centered attitude in these matters cannot fail to bring advantage to all. The present economic situation should cause us to give most careful heed to these things.

That part of the increase in the cost of living which is due to monetary causes—to the increase of gold in circulation and to the expansion of credit—is in a sense